

## BIBLIOGRAPHICAL RECORD.

*Authors and societies are requested to forward their works to the editors as soon as published. The date of publication, given in brackets [ ], marks the time at which the work was received, unless an earlier date of publication is known to recorder or editor. Unless otherwise stated each record is made directly from the work that is noticed.*

*Corrections of errors and notices of omissions are solicited.*

- "Buffalo gnat" of the Mississippi valley (The). (Sci. amer., 20 May 1882, v. 46, p. 309, col. 3, 5 cm.)  
Notes on a species of *simulium* and means to use against it. G: D. (2749)
- Crow (The). (Sci. amer., 8 April 1882, v. 46, p. 216, col. 2, 10 cm.)  
Defends *corvus americanus* because of its insectivorous habits. G: D. (2750)
- Delpino, Federico. *Nettarii estranziali.* (Rivista botanica, 1880, p. 23-24.)  
Abstract of W: Trelease's "Nectar, its nature, occurrence and uses" . . . [Rec., 2475]. W: T. (2751)
- Dez Vaulx, J. P. *Plaisirs et profits de l'éleveur d'abeilles.* Deuxième édition. Lille et Paris. J. Lefort, 1877. t.-p. cover, 180 p. 18 X 12. t 12.5 X 7.4. pap. 1 fr. 50 c.  
Popular general work on apiculture. G: D. (2752)
- Dilar in North America. (Amer. nat., Oct. 1881, v. 15, p. 822.)  
Note on *dilar americanus* G: D. (2753)
- Do bees injure grapes? (Sci. amer., 25 Feb. 1882, v. 46, p. 121, col 3; 4 cm.)  
Bees, it is decided, do not puncture the skin of grapes. G: D. (2754)
- Domestic silk growing. (Sci. amer., 11 Feb. 1882, v. 46, p. 84, col. 2-3, 42 cm.)  
Notice of the first exhibition of the Women's Silk Culture Association, in Philadelphia; statistics on silk culture. G: D. (2755)
- Double hybrid worm-proof cotton. (Sci. amer., 7 Jan. 1882, v. 46, p. 6, col. 3, 5 cm.)  
Notice of a variety of cotton plant said to resist the attacks of worms. G: D. (2756)
- Edwards, W: H: Habits of butterflies. (Amer. nat., Feb. 1882, v. 16, p. 122-123.)  
On use of odor of *heliconia charitonia* and on the broods of *argynnis myrina*. Paper read at the Cincinnati (1881) meeting of the Amer. assoc. advanc. sci. G: D. (2757)
- Emmett, Jane. Bees. (Gard. chronicle, 7 Nov. 1857, p. 757, 9 cm.)  
Records the perforation of calyx and corolla of "the common red *salvia*" [*s. splendens?*], by *bombus*; and notes the curious behavior of *apis mellifica* when given spurs of the double columbine [*aquilegia*]. W: T. (2758)
- Ernst, A. Fertilization of *coboea penduliflora* [Rec., 2395].  
Notice. (Amer. nat., Sept. 1880, v. 14, p. 669.)  
Crit. rev. of notice, by A. Ernst, in his "The lac insect" (Amer. nat., Mar. 1881, v. 15, p. 235) [Rec., 2760]. G: D. (2759)
- Ernst, A. The lac insect. (Amer. nat., March 1881, v. 15, p. 235.)  
Additions to J. M. Stillman's "On the origin of the lac" (Amer. nat., Nov. 1880, v. 14, p. 782-787) [Rec., 2792], and crit. rev. of the notice of author's "Fertilization of *coboea penduliflora*" (Nature, 17 June 1880, v. 22, p. 148-149) [Rec., 2395]. G: D. (2760)
- Farrer, T. H. On the manner of fertilization of the scarlet runner and blue *lobelia*. (Ann. and mag. nat. hist., Oct. 1868, ser. 4, v. 2, p. 255-263; 2 fig.)  
Shows the adaptation of the flowers of *phaseolus* and *lobelia* to crossing by insect agency, and notes the behavior of insects while visiting them. Observations on the floral structure of *campanula* and *jastonec* are added. W: T. (2761)
- Fuller, Andrew S., see BASKET WORM (The) . . . [Rec., 2220].
- Gibson, W: Hamilton. Among our footprints. (Harper's new mo. mag., Dec. 1881, v. 64, p. 65-82, 16 fig.)  
A popular article on natural history. The habits of a number of insects are described. The pollination of *asclepias* by *apis mellifica* and *bombus*, and the occasional death of both insects from the encumbrance of too many pollinia, are noted. A very good account of the cross-fertilization of *habenaria psycodes* by *sesia* is given. W: T. (2762)
- Gray, Asa, see PACKARD, A. S., jr., Moths entrapped by an asclepiad plant . . . [Rec., 1671].
- Griffith, H. G. Carnivorous habits of *microcentrus retinervis*. (Amer. nat., May 1882, v. 16, p. 408.)  
*M. retinervis* eat *megilla maculata*. G: D. (2763)
- Heimerl, Anton. Ueber die Beziehungen zwischen Blumen und Insecten. (Wiener illustrierte Garten-Zeitung, 1881, jahrg. 6: Jan., p. 1-3; Feb., p. 49-54.)  
Discusses the relative value of cross- and self-fertilization in plants, and shows how the former is secured by aid of insects: in *tilium martagon* by *macroglossa stellatarum*, in *salvia pratensis* and *linaria vulgaris* by *bombus*. W: T. (2764)

**Hercules beetle** (The). (Sci. amer., 4 March 1882, v. 46, p. 135, col. 1, 23 cm.)

Notes on habits of, and figure of *scarabaeus hercules*. From *La nature*. G: D. (2765)

**Hildebrand, Friedrich**. Experimente zur Dichogamie und zum Dimorphismus. (Bot. Zeitung, 1865, v. 23: 6 Jan., p. 1-6; 13 Jan. p. 13-15; 27 Jan. p. 36, 3 cm.)

Describes the structure of the flowers of *geranium pratense*, *digitalis purpurea* and *pulmonaria officinalis*, noting the behavior of insects when visiting them, and giving the results of experiments on their artificial fertilization. W: T. (2766)

**Hildebrand, Friedrich**. F. Delpino's Weitere Beobachtungen über die Dichogamie im Pflanzenreich, mit Zusätzen und Illustrationen. (Bot. Zeitung, 1870: 16 Sept., c. 585-594; 23 Sept., c. 601-609; 30 Sept., c. 617-625; 7 Oct., c. 633-641; 14 Oct., c. 649-659; 21 Oct., c. 665-675, pl. 10.)

Translation of the greater part of F. Delpino's "Ulteriori osservazioni sulla dicogamia . . . Parte I" [Rec., 2301], with comments. The article is illustrated by a lithographic plate of 30 good figures by the translator. W: T. (2767)

**Hoffmann, H.** Zur Kenntniss der Gartenbohnen. (Bot. Zeitung, 1874, v. 32: 1 May, c. 273-283; 8 May, c. 289-302, pl. 5.)

Experiments on the variation induced in *phaseolus multiflorus* and *ph. vulgaris* by crossing showed that both species are self-fertile, the latter to a greater degree than the former. Experiments in artificial crossing of varieties gave chiefly negative results, from which the writer concludes that crossing is impossible, or at least very doubtful. Reference is made to the literature on insect-fertilization of the species of *phaseolus* (c. 295-296). W: T. (2768)

**Howard, Leland O.** Strange habits of *metapodius femoratus* Fab. (Amer. nat., July 1882, v. 16, p. 597-598.)

*M. femoratus* hangs up the empty skins of larvae of *leucania unipuncta*, from which it has sucked the juices, on the catches of the stems of may-weed [*marata cotula*]. G: D. (2769)

**How to get rid of water bugs.** (Sci. amer., 1 April 1882, v. 46, p. 193, col. 3, 3 cm.)

Recommends equal parts of powdered borax and sugar for water bugs [*ectobia germanica*]. G: D. (2770)

**Kabsch, W.** Anatomische und physiologische Beobachtungen über die Reizbarkeit der Geschlechtsorgane. (Bot. Zeitung, 1861, v. 19: 25 Jan., p. 25-29; 1 Feb., p. 33-37, pl. 1.)

Considers the irritable organs of a number of genera. In the *cynareae* protandry necessitates the aid of insects or other agents in fertilization. W: T. (2771)

**Kidder, J. H.** Note on the first insect from Wrangell Island. (Amer. nat., May 1882, v. 16, p. 498-499.)

An undescribed species of *erigone* and a larva, doubtfully lepidopterous, from Wrangell Island. G: D. (2772)

**Lac.** (Sci. amer., 8 April 1882, v. 46, p. 217, col. 1-3, 83 cm.)

General notes on lac; its source (*coccus lacca*), qualities, chemical constitution, mode of preparation, technical uses, employment as medicine. G: D. (2773)

**Locusts in Angora.** ("London [Engl.] telegraph" . . .) (Sci. amer., 20 May 1882, v. 46, p. 310-311, 22 cm.)

Notes on means attempted to destroy the locusts in Angora, Asia Minor. G: D. (2774)

**Locust probabilities for 1882.** (Amer. nat., Feb. 1882, v. 16, p. 153.)

Notes on the locusts of the western United States, from letter by Lawrence Bruner. G: D. (2775)

**Lubbock, J.** "Blumen und Insecten in ihrer Wechselbeziehung dargestellt. Nach der 2e Auflage. Berl., Bornträger, 1877. 8vo." Rev., by [Ernst] K[rause]. (Kosmos, June 1877, v. 1, p. 275, 18 cm.)

Ger. tr., by A. Passow, of Lubbock's "On British wild flowers considered in relation to insects" . . . [Rec., 2528]. W: T. (2776)

**Mégnin, P.** Les parasites et les maladies parasitaires chez l'homme, les animaux domestiques et les animaux sauvages avec lesquels ils peuvent être en contact. Insectes, arachnides, crustacés. Avec 65 figures dans le texte et un atlas de 26 planches dessinées par l'auteur. Texte, Paris, G. Masson, 1880. t.-p. cover, [6+] 478 p. 23×14, t 17×9.5. il. Pap., with atlas, 20 fr. Atlas. t.-p. cover, [4 p.], 26 pl., each with p. of explanations. 23×15.

Crit. rev. (Bericht . . . der Entom., 1879, p. 7, 64-65, 69.)

General work on the arthropoda parasitic on man and domestic animals: p. 6-51, diptera; p. 52-56, hemiptera; p. 57-71, aphaniptera and coleoptera, including here the *pulicidae*, and *platypsyllidae*; p. 72-104, "epizoiques," including the *pediculidae* and *mallophaga*; p. 105-439, acarina; p. 440-456, crustacea; p. 457-459, addenda, errata, etc.; p. 460-478, alphabetic and systematic index. Diseases caused by parasites, and remedies for them; general notes accompany the descriptions of the parasites. All the figures in the atlas are of acarina. G: D. (2777)

**Miller, W.** Bees as fertilizing agents. (Gard. chronicle, 1 Feb. 1879, n. s., v. 11, p. 138-139.)

States that bees are profitably introduced into peach houses to effect pollination of the flowers. W: T. (2778)

**Mimicry in fungi.** (Amer. nat., Jan. 1882, v. 16, p. 42.)

From *Grevillea*. Fungi not rarely imitate vegetable, animal, or excrementitious substances, either as regards external appearance or as regards odor, so as to attract insects. G: D. (2779)

**Moore, S. Le M.** Notes on Mascarene orchidology. (Journ. of botany, 1876, v. 14, n. s., v. 5, p. 289-292, pl. 181.)

Shows the methods for ensuring cross-fertilization in *angracum* and its allies, in *listrostachys pescatoriana*, and in *cynorchis*. The visits of insects are not mentioned. W: T. (2780)

**Müller, Hermann.** The fertilization of alpine flowers. (*Nature*, 22 Jan. 1880, v. 21, p. 275, 15 cm.)

A tabulated statement of the visits of insects to flowers in the lowlands, at a moderate elevation, and above the timber line. W: T. (2781)

**New insects to agriculture.** (*Amer. nat.*, Feb. 1882, v. 16, p. 151-152.)

Abstract of paper read by C. V. Riley at the Cincinnati (1881) meeting of the Amer. assoc. advanc. sci. General considerations on the appearance of insects injurious to agriculture, but previously unknown in an injurious capacity. G: D. (2782)

**Oviposition of *prodoxus decipiens* (On the).** (*Amer. nat.*, Jan. 1882, v. 16, p. 62-63.)

Abstract of a paper read by C. V. Riley at the Cincinnati meeting of the Amer. assoc. advanc. sci. in 1881. G: D. (2783)

**Peixotto, F. C.** How silk is reeled in France. (*Sci. amer.*, 10 June 1882, v. 46, p. 360-361, 58 cm.)

Describes silk-reeling in France. G: D. (2784)

**Profits of silk culture (The).** (*Sci. amer.*, 4 March 1882, v. 46, p. 128, col. 2-3, 17 cm.)

Crit. rev. of "Silk raising at the south" [*Rec.*, 2788]. G: D. (2785)

**Riley, C: Valentine.** Silk culture in the United States. (*Sci. amer.*, 1 April 1882, v. 46, p. 193, col. 1-2, 73 cm.)

General notes on silk culture applicable to the United States. G: D. (2786)

**Riley, C: Valentine.** Successful management of the insects most destructive to the orange. (*Sci. amer.*, 27 May 1882, v. 46, p. 335-336, 171 cm., 5 fig.)

Treats of the *coccidae* injurious to the orange, and of the insecticides used against them, especially of kerosene used in an emulsion with water. Figures stages of *mytilaspis pomtorticis*, *m. gloverii* and *m. citricola*. G: D. (2787)

**Silk raising at the south.** (*Sci. amer.*, 11 Feb. 1882, v. 46, p. 88, col. 1-2, 41 cm.)

Crit. rev. entitled "Profits of silk culture." (*Sci. amer.*, 4 March 1882, v. 46, p. 128, col. 2-3, 17 cm.)

From *Louisville* [Ky.] *courier journal*. Amount of care required in rearing silk-worms in the southern United States. G: D. (2788)

**Six cents a piece for wasps.** (*Sci. amer.*, 18 March 1882, v. 46, p. 167, col. 2, 7 cm.)

On account of the destruction of fruit by wasps an English fruit-grower offers 3 d. each for queen wasps. Number of wasps in a nest. G: D. (2789)

**Some curious bugs.** (*Sci. amer.*, 6 May 1882, v. 46, p. 279, col. 1-2, 49 cm., fig.)

General popular notes on hemiptera; figures a large Indian *belostoma*. From *La nature*. G: D. (2790)

**Sprang, G:** The fertilization of the trumpet-creeper. (*Bot. gazette*, Dec. 1881, v. 6, p. 302-303, 11 cm.)

Shows how cross-fertilization is effected by humming-birds. Notes the perforation of calyx and corolla by a "black ant," which feeds upon the nectar. W: T. (2791)

**Stillman, J: M.** On the origin of the lac. (*Amer. nat.*, Nov. 1880, v. 14, p. 782-787.)

Contrary to the statement of several cyclopedias, lac is a product elaborated by *corcus*, and not an exudation from the tree on which it lives; reasons for this view drawn from *c. lacca* and from an analogous insect which produces Arizona lac. See also A. Ernst's "The lac insect" (*Amer. nat.*, Mar. 1881, v. 15, p. 235) [*Rec.*, 2760]. G: D. (2792)

**Taylor, J. E.** The geological antiquity of flowers and insects. (*Pop. sci. rev.*, Jan. 1878, v. 17, n. s., v. 2, p. 36-52.)

Traces the contemporaneous evolution of flowers and insects. W: T. (2793)

**Threatening pest (A).** (*Sci. amer.*, 22 April 1882, v. 46, p. 248, col. 2, 7 cm.)

An insect, known as the Australian bug, does much damage to trees near Cape Town, South Africa. G: D. (2794)

**Trelease, W:** On the fertilization of *calamintha nepeta*. (*Amer. nat.*, Jan. 1881, v. 15, p. 11-15, 2 fig.)

List of some of the insects aiding to fertilize *c. nepeta*. G: D. (2795)

**Trelease, W:** The fertilization of alpine flowers. (*Bulletin Torrey bot. club*, Feb. 1881, v. 8, p. 13-14, 25 cm.)

Review of H. Müller's "Alpenblumen, ihre Befruchtung, ..." [*Rec.*, 2175]. W: T. (2796)

**Wild bee hunting.** ("N. Y. observer.") (*Springfield* [Mass.] *d. republican*, 26 Oct. 1880, p. 3, col. 1-2, 15 cm.)

How wild bees are traced to their home. G: D. (2797)

**Women's silk culture association.** (*Sci. amer.*, 29 April 1882, v. 46, p. 258, col. 1, 5 cm.)

Brief notes on silk raised in America. G: D. (2798)

**Wood, W. Martin.** New variety of silk moth. (*Sci. amer.*, 8 April 1882, v. 46, p. 215, col. 3, 18 cm.)

Notes on a hybrid of *saturnia yama-maj* and the Tusser moth [*antheraea paphia*]. G: D. (2799)

**Young, C. A.** How spiders fly. ("Boston *jour. chem.*"...) (*Sci. amer.*, 21 Jan. 1882, v. 46, p. 42, col. 2-3, 30 cm.)

Regards the "action of the sun's rays on the thread itself and its surrounding envelope of air" as the main cause of the buoyancy of the web which supports floating, or so-called flying, spiders. G: D. (2800)